

CLAIMS

What is claimed is:

1. A composite comprising:
 - (a) a first layer of a fabric containing high strength fibers bonded with a resin wherein the first layer will deflect in a range from 5.0 to 17.5 centimeters employing a 33 kilogram (15 pound) projectile at a speed of 161 kilometers (100 miles) per hour in accordance with ASTM test procedure E1886-97 mounted on one layer of $\frac{3}{4}$ inch plywood with #10d nails on a frame in accordance with FEMA Publication 320, Revision 1 specific to Drawings AG-5 and 14, and
 - (b) a second layer of structural sheathing.
2. The composite of claim 1 wherein the deflection is in a range from 8.0 to 16.0 centimeters.
3. The composite of claim 1 wherein the high strength fibers are selected from the group consisting of aramid fibers, glass fibers, polyethylene fibers, polyvinyl alcohol fibers, polyarylate fibers, polybenzazole fibers, or carbon fibers.
4. The composite of claim 1 wherein the high strength fibers comprise an aramid.
5. The composite of claim 1 wherein the high strength fibers are glass.
6. The composite of claim 1 wherein the second layer is at a thickness of at least 0.65 centimeters (one quarter inch).
7. The composite of claim 1 wherein the second layer comprises plywood.
8. A building structure having an integral portion of the structure comprising a composite comprising:
 - (a) a first layer of a fabric containing high strength fibers bonded with a resin wherein the first layer will deflect in a range from 5.0 to 17.5 centimeters employing a 33 kilogram (15 pound)

projectile at a speed of 100 kilometers (100 miles) per hour in accordance with test procedure E1886-97 mounted on one layer of ¾ inch plywood with #10d nails on a frame in accordance with FEMA Publication 320, Revision 1 specific to Drawings AG-5 and 14, and

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(b) a second layer of a structural sheathing.

wherein the first layer faces an interior portion of the structure and the second layer faces or comprises an outer layer of the structure.

9. The building structure of claim 8 wherein the integral portion
10 comprises a wall.

10. The building structure of claim 8 wherein the integral portion comprises a ceiling.

11. The building structure of claim 8 comprising the second layer of structural sheathing at a thickness of at least 0.65 centimeters (one quarter
15 inch).

12. The building structure of claim 8 wherein the deflection is in a range from 8.0 to 16.0 centimeters.

13. The building structure of claim 8 wherein the high strength fibers are selected from the group consisting of aramid fibers, glass fibers, polyethylene fibers, polyvinyl alcohol fibers, polyarylate fibers, polybenzazole
20 fibers, or carbon fibers.

14. The building structure of claim 8 wherein the high strength fibers comprise an aramid.

15. The building structure of claim 8 wherein the high strength
25 fibers are glass.

16. The building structure of claim 8 wherein the second layer is at a thickness of at least 1.27 centimeters (one half inch).

17. The building structure of claim 8 wherein the second layer comprises plywood.